

**REMARKS**

This amendment is filed in response to the Office Action dated August 10, 2007. In view of this amendment, this application should be allowed and the case passed to issue. No new matter is introduced by this amendment. The amendment to claim 2 is supported by originally filed claim 1. Claims 3-11 are amended to correct dependency, and claim 12 is amended to depend from claim 2.

Claims 2-12 are pending in this application. Claims 1 and 3-12 are rejected. Claims 2-12 are amended in this response. Claim 1 is canceled in this response.

***Allowable Subject Matter***

Claim 2 was objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form.

Applicants gratefully acknowledge the indication of allowable subject matter. In accordance with the Examiner's recommendation, claim 2 has been rewritten in independent form and the remaining claims were rewritten to depend from claim 2. Applicants submit that the application is in condition for allowance.

***Claim Rejections Under 35 U.S.C. §§ 102 and 103***

Claim 12 was rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Badwal et al. (Solid State Ionics, 2000 V136-137, pp 91-99).

Claim 12 was rejected under 35 U.S.C. § 102(b) as anticipated by Tanaka et al. (US 4,328,296).

These rejections are traversed, and reconsideration and withdrawal thereof respectfully requested.

Claim 12 has been amended to depend from allowable claim 2. Neither Badwal et al., nor Tanaka et al. teach or suggest a solid electrolyte obtained by a spark plasma method produced by preparing solid electrolyte material with a composition expressed by a formula:  $(1-x) \text{ZrO}_2 + x\text{Sc}_2\text{O}_3$  (where  $x$  is a number equal to or greater than 0.05 and equal to or less than 0.15) and sintering the solid electrolyte material to obtain a solid electrolyte using a spark plasma method, which is provided with: sintering the solid electrolyte material to obtain sintered material while applying first compression load to the solid electrolyte material at a level equal to or less than 40 MPa; and cooling the sintered material to obtain the solid electrolyte while applying second compression load, less than the first compression load, to the sintered material, wherein the second compression load has a value equal to or greater than 10 MPa and equal to or less than 15 MPa, as required by claim 12.

The claimed method provides solid electrolyte with an unexpected improvement in ion conductivity, as shown in Table 1 (solid electrolytes according to the present invention) and Table 4 (comparative solid electrolytes).

Claims 1, 3-5, and 7-11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Badwal et al. in view of Takeuchi et al. (J. Electrochem. Soc. 2002, 149(4), pp 455-461).

Claim 6 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Badwal et al. in view of Takeuchi et al. and Mazanec (US 6,019,885).

These rejections are traversed, and reconsideration and withdrawal thereof respectfully requested.

Dependent method claims 3-11 were amended to depend from allowable method claim 2. Therefore, claims 3-11 are allowable for at least the same reasons as claim 2.

In view of the above amendments and remarks, Applicants submit that this application should be allowed and the case passed to issue. If there are any questions regarding this Amendment or the application in general, a telephone call to the undersigned would be appreciated to expedite the prosecution of the application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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